

Newly Added Claims
Claims 32 - 51

32. A method of preparing an electromagnetically conductive textile fabric, wherein the fabric comprises conductive fibers creating a conductivity gradient through the thickness of the fabric, and wherein the fabric is selected from the group consisting of woven, knitted and nonwoven fabrics, comprising the steps of:
- (a) forming a fabric selected from the group consisting of (i) a fabric in which the surface area of the fibers per unit volume varies through the thickness of the fabric; and (ii) a fabric containing first and second fibers, wherein the first and second fibers have different susceptibilities to being coated by a conductive coating, and wherein the relative concentration of the first and second fibers varies through the thickness of the fabric; and
 - (b) applying a conductive coating to fibers in the fabric, thereby creating a conductivity gradient through the thickness of the fabric.
33. The method of Claim 32, wherein the conductive coating is selected from the group consisting of carbon, ferrite, metals and conductive polymers.
34. The method of Claim 32, wherein the conductive coating is a conductive polymer.
35. The method of Claim 34, wherein the conductive polymer is selected from the group consisting of polypyrrole, polyaniline and derivatives thereof.
36. The method of Claim 32, wherein the fabric is knitted.
37. The method of Claim 32, wherein the fabric is a felt.
38. The method of Claim 32, wherein the fabric comprises a plurality of superimposed webs of different fiber densities, which have been needlepunched to form a unitary construction.
39. The method of Claim 32, further comprising step (c) of adding a second coating to fibers of the fabric, wherein the second coating is selected from the group consisting of a poly(vinyl chloride), a poly(vinylidene chloride), a fire retardant, a colorant and a water repellant coating.
40. The method of Claim 32, wherein the fabric has a thickness ranging from 40 mils to 4 inches.
41. The method of Claim 32, wherein the fabric has a thickness ranging from 100 mils to 1 inch.

42. The method of Claim 32, wherein the fabric has a transmission loss through the fabric of greater than 5 dB at 9 GHz, where $\text{dB loss} = 20 \log (V_w/V_o)$ where V_w is the electric field intensity measured through the fabric and V_o is the electric field intensity measured without the fabric.
43. The method of Claim 32, wherein the fabric has a transmission loss through the fabric of greater than 15 dB at 9 GHz, where $\text{dB loss} = 20 \log (V_w/V_o)$, where V_w is the electric field intensity measured through the fabric and V_o is the electric field intensity measured without the fabric.
44. The method of Claim 32, wherein the conductivity varies from the inner $\frac{1}{4}$ of fabric thickness of higher conductivity to the outer $\frac{1}{4}$ of fabric thickness of lower conductivity by a factor of at least 1.5:1.
45. The method of Claim 32, wherein the conductivity varies from the inner $\frac{1}{4}$ of fabric thickness of higher conductivity to the outer $\frac{1}{4}$ of fabric thickness of lower conductivity by a factor of at least 4:1.
46. The method of Claim 32, wherein the fabric comprises fibers selected from the group consisting of silk, wool, cotton, polyester, nylon and acrylic fibers.
47. A method of preparing an electromagnetically conductive textile fabric, wherein the fabric comprises conductive fibers creating a conductivity gradient through the thickness of the fabric, and wherein the fabric is selected from the group consisting of woven, knitted and nonwoven fabrics, comprising the steps of:
- (a) forming a fabric in which the fabric varies through its thickness in a property selected from the group consisting of fiber density, fiber denier and surface area of fiber per unit volume; and
 - (b) applying a conductive coating to the fibers, thereby creating a conductivity gradient through the thickness of the fabric.
48. The method of Claim 47, wherein the conductive coating is a conductive polymer selected from the group consisting of polypyrrole, polyaniline and derivatives thereof.
49. The method of Claim 47, wherein the fabric comprises a plurality of superimposed webs of different fiber densities, which have been needlepunched to form a unitary construction.

Appendix 3

50. The method of Claim 47, wherein the conductivity varies from the inner $\frac{1}{4}$ of fabric thickness of higher conductivity to the outer $\frac{1}{4}$ of fabric thickness of lower conductivity by a factor of at least 4:1.
51. The method of Claim 47, wherein the fabric has a thickness ranging from 100 mils to 1 inch.